AMENDMENTS TO THE CLAIMS

The following is a complete, marked up listing of revised claims with a status identifier in parentheses, underlined text indicating insertions, and strikethrough and/or double-bracketed text indicating deletions.

LISTING OF CLAIMS

1.-16.   (Cancelled)

17.   (Currently Amended) A ~~computer-readable~~ recording medium storing a data structure for managing reproduction of at least video data representing multiple reproduction paths, comprising:

a data area storing a transport stream of at least video data, the transport stream being divided into transport packets, each of the transport packets associated with one of the multiple reproduction paths, and the transport packets of each reproduction path being stored as a separate file from one another such that different reproduction paths represent different video data, and

a navigation area storing a first navigation unit, the first navigation unit including one or more second navigation units and controlling a reproduction order of the second navigation units, at least one second navigation unit referencing more than one third navigation unit and including ~~an indicator~~ a single flag, the value of the single flag ~~for~~ indicating that either the corresponding at least one second navigation unit is provided for the multiple reproduction paths or the corresponding at least one second navigation unit is provided for a single reproduction path, each third navigation unit not including video data and associated with a different one of the multiple reproduction paths and identifying [[a]] the separate file of video data in the data area to reproduce.

18.   (Cancelled)

19.   (Currently Amended) The ~~computer-readable~~ recording medium of claim 17, wherein a number of the third navigation units associated with the at least one of the second navigation units is equal to a number of the multiple reproduction paths.

20.   (Cancelled)

21.   (Currently Amended) The ~~computer-readable~~ recording medium of claim 19, wherein at least one other second navigation unit includes an indicator indicating the corresponding at least one other second navigation unit is provided for only one of the multiple reproduction paths.

22.   (Cancelled)

23.   (Currently Amended) The ~~computer-readable~~ recording medium of claim 17, wherein the transport packets of each reproduction path are stored in separate physical domains of the data area from one another.

24.   (Currently Amended) The ~~computer-readable~~ recording medium of claim 17, wherein each reproduction path represents a digital channel.

25.   (Cancelled)

26.   (Currently Amended) A method of recording a data structure for managing reproduction of at least video data representing multiple reproduction paths, comprising:

recording a transport stream of at least video data on the recording medium, the transport stream being divided into transport packets, each of the transport packets associated with one of the multiple reproduction paths, and the transport packets of each reproduction path being stored as a separate file from one another such that different reproduction paths represent different video data; and

recording a first navigation unit on the recording medium, the first navigation unit including one or more second navigation units and controlling a reproduction order of the second navigation units, at least one of the second navigation units referencing more than one third navigation unit and including ~~an indicator~~ a single flag, the value of the single flag ~~for~~ indicating that either the corresponding at least one second navigation unit is provided for the multiple reproduction paths or the corresponding at least one second navigation unit is provided for a single reproduction path, each third navigation unit not including video data and associated with a different one of the multiple reproduction paths and identifying [[a]] the separate file of video data to reproduce.

27.   (Cancelled)

28.   (Previously Presented) The method of claim 26, wherein a number of the third navigation units associated with the at least one of the second navigation units is equal to a number of the multiple reproduction paths.

29.   (Previously Presented) The method of claim 28, wherein at least one other second navigation unit includes an indicator indicating the corresponding at least one other second navigation unit is provided for only one of the multiple reproduction paths.

30.   (Cancelled)

31.   (Previously Presented) The method of claim 26, wherein the transport packets of each reproduction path are stored in separate physical domains of the recording medium from one another

32.   (Previously Presented) The method of claim 26, wherein each reproduction path represents a digital channel.

33.   (Cancelled)

34.   (Currently Amended) A method of reproducing a data structure for managing reproduction duration of at least video data representing multiple reproduction paths, comprising:

reproducing a transport stream of at least video data from the recording medium, the transport stream being divided into transport packets, each of the transport packets associated with one of the multiple reproduction paths, and the transport packets of each reproduction path being stored as a separate file from one another such that different reproduction paths represent different video data; and

reproducing a first navigation unit from the recording medium, the first navigation unit including one or more second navigation units and controlling a reproduction order of the second navigation units, at least one of the second navigation units referencing more than one third navigation unit and including an indicator a single flag, the value of the single flag for indicating that either the corresponding at least one second navigation unit is provided for the multiple reproduction paths or the corresponding at least one second navigation unit is provided for a single reproduction path, each third navigation unit not including video data and associated with a different one of the multiple reproduction paths and identifying [[a]] the separate file of video data to reproduce.

35.   (Cancelled)

36.   (Previously Presented) The method of claim 34, wherein a number of the third navigation units associated with the at least one of the second navigation units is equal to a number of the multiple reproduction paths.

37.   (Previously Presented) The method of claim 36, wherein at least one other second navigation unit includes an indicator indicating the corresponding at least one other second navigation unit is provided for only one of the multiple reproduction paths.

38.   (Cancelled)

39.   (Previously Presented) The method of claim 34, wherein the transport packets of each reproduction path are stored in separate physical domains of the recording medium from one another

40.   (Previously Presented) The method of claim 34, wherein each reproduction path represents a digital channel.

41.   (Cancelled)

42.   (Currently Amended) An apparatus for recording a data structure for managing reproduction duration at least video data representing multiple reproduction paths, comprising:
        an optical pickup configured to record data on the recording medium;

a controller, operably coupled to the optical pickup, configured to control the optical pickup to record a transport stream of at least video data on the recording medium, the transport stream being divided into transport packets, each of the transport packets associated with one of the multiple reproduction paths, and the transport packets of each reproduction path being stored as a separate file from one another such that different reproduction paths represent different video data, and the controller configured to control the optical pickup to record a first navigation unit on the recording medium, the first navigation unit including one or more second navigation units and controlling a reproduction order of the second navigation units, at least one of the second navigation units referencing more than one third navigation unit and including ~~an indicator~~ a single flag, the value of the single flag ~~for~~ indicating that either the corresponding at least one second navigation unit is provided for the multiple reproduction paths or the corresponding at least one second navigation unit is provided for a single reproduction path, each third navigation unit not including video data and associated with a different one of the multiple reproduction paths and identifying [[a]] the separate file of video data to reproduce.

43.   (Cancelled)

44.   (Previously Presented) The apparatus of claim 42, wherein a number of the third navigation units associated with the at least one of the second navigation units is equal to a number of the multiple reproduction paths.

45.   (Previously Presented) The apparatus of claim 44, wherein at least one other second navigation unit includes an indicator indicating the corresponding at least one other second navigation unit is provided for only one of the multiple reproduction paths.

46.   (Cancelled)

47.   (Previously Presented) The apparatus of claim 42, wherein the transport packets of each reproduction path are stored in separate physical domains of the recording medium from one another

48.   (Previously Presented) The apparatus of claim 42, wherein each reproduction path represents a digital channel.

49.   (Cancelled)

50.   (Currently Amended) An apparatus for reproducing a data structure for managing reproduction duration of at least video data representing multiple reproduction paths, comprising:

an optical pickup configured to reproduce data recorded on the recording medium;

a controller, operably coupled to the optical pickup, configured to control the optical pickup to reproduce a transport stream of at least video data from the recording medium, the transport stream being divided into transport packets, each of the transport packets associated with one of the multiple reproduction paths, and the transport packets of each reproduction path being stored as a separate file from one another such that different reproduction paths represent different video data, and the controller further configured to control the optical pickup to reproduce a first navigation unit from the recording medium, the first navigation unit including one or more second navigation units and controlling a reproduction order of the second navigation units, at least one of the second navigation units referencing more than one third navigation unit and ~~an indicator~~ a single flag, the value of the single flag ~~for~~ indicating that either the corresponding at least one second navigation unit is provided for the multiple reproduction paths or the corresponding at least

one second navigation unit is provided for a single reproduction path, each third navigation unit not including video data and associated with a different one of the multiple reproduction paths and identifying [[a]] the separate file of video data to reproduce.

51.   (Cancelled)

52.   (Previously Presented) The apparatus of claim 50, wherein a number of the third navigation units associated with the at least one of the second navigation units is equal to a number of the multiple reproduction paths.

53.   (Previously Presented) The apparatus of claim 52, wherein at least one other second navigation unit includes an indicator indicating the corresponding at least one other second navigation unit is provided for only one of the multiple reproduction paths.

54.   (Cancelled)

55.   (Previously Presented) The apparatus of claim 50, wherein the transport packets of each reproduction path are stored in separate physical domains of the recording medium from one another

56.   (Previously Presented) The apparatus of claim 50, wherein each reproduction path represents a digital channel.

57.   (Cancelled)

58.   (Currently Amended) A method of creating a data structure for managing reproduction of at least video data representing multiple reproduction paths, comprising:

recording a transport stream of the at least video data, the transport stream being divided into transport packets, each of the transport packets associated with one of the multiple reproduction paths, and the transport packets of each reproduction path being stored as a separate file from one another such that different reproduction paths represent different video data; and

recording a first navigation unit, the first navigation unit including one or more second navigation units and controlling a reproduction order of the second navigation units, at least one of the second navigation units referencing more than one third navigation unit and including ~~an indicator~~ a single flag, the value of the single flag ~~for~~ indicating that either the corresponding at least one second navigation unit is provided for the multiple reproduction paths or the corresponding at least one second navigation unit is provided for a single reproduction path, each third navigation unit not including video data and associated with a different one of the multiple reproduction paths and identifying [[a]] the separate file of video data to reproduce.

59.   (Previously Presented) The method of claim 58, wherein a number of the third navigation units associated with the at least one of the second navigation units is equal to a number of the multiple reproduction paths.

60.   (Previously Presented) The method of claim 59, wherein at least one other second navigation unit includes an indicator indicating the corresponding at least one other second navigation unit is provided for only one of the multiple reproduction paths.

61.   (Cancelled)

62.   (Previously Presented) The method of claim 58, wherein the transport packets of each reproduction path are stored in separate physical domains from one another

63.   (Previously Presented) The method of claim 58, wherein each reproduction path represents a digital channel.

64.   (Cancelled)

65.   (Previously Presented)   The computer-readable medium of claim 17, wherein the third navigation units and the separate files of video data have a one to one correspondence.

66.   (Currently Amended)   The ~~computer-readable~~ recording medium of claim 17, wherein each third navigation data provides position data for one of the separate files of video data.

67.   (Previously Presented)   The method of claim 26, wherein the third navigation units and the separate files of video data have a one to one correspondence.

68.   (Previously Presented)   The method of claim 26, wherein each third navigation data provides position data for one of the separate files of video data.

69.   (Previously Presented)   The method of claim 34, wherein the third navigation units and the separate files of video data have a one to one correspondence.

70. (Previously Presented) The method of claim 34, wherein each third navigation data provides position data for one of the separate files of video data.

71. (Previously Presented) The apparatus of claim 42, wherein the third navigation units and the separate files of video data have a one to one correspondence.

72. (Previously Presented) The apparatus of claim 42, wherein each third navigation data provides position data for one of the separate files of video data.

73. (Previously Presented) The apparatus of claim 50, wherein the third navigation units and the separate files of video data have a one to one correspondence.

74. (Previously Presented) The apparatus of claim 50, wherein each third navigation data provides position data for one of the separate files of video data.

75. (Previously Presented) The method of claim 58, wherein the third navigation units and the separate files of video data have a one to one correspondence.

76. (Previously Presented) The method of claim 58, wherein each third navigation data provides position data for one of the separate files of video data.

* * * END OF CLAIM LISTING * * *